

IN THE CLAIMS:

LISTING OF ALL CLAIMS WITH STRIKEOUT OR UNDERLINES INDICATING CHANGE

1-7. Canceled.

8. (Previously Presented) A system for accumulating customer transaction data at the point-of-sale in a retail establishment and for effectuating customer promotion on the basis thereof, comprising:

a terminal for entering unique customer identification codes from customer identification presented at the point-of-sale in a retail transaction;

means for allowing entry of customer transaction data;

a processor and

a memory responsive to said terminal and said means allowing entry for creating a database for a plurality of the store's customers' transaction data from prior shopping visits, such that data regarding individual customer's prior transactions are stored in association with said individual customer's unique identification code; and

circuitry responsive to said processor, memory, and database for generating a customer information response signal at the point-of-sale during said individual customer's transaction in said retail establishment upon detection of a unique identification code of said individual customer,

said signal being related to said individual customer's transaction data in shopping visits prior to the current shopping visit, and

said signal providing information at said point-of-sale terminal derived from said database and useful for effectuating targeted customer promotion.

9. (Previously presented) A system for accumulating and using customer transaction data at the point-of-sale in a retail establishment comprising:

apparatus for entering unique customer identification codes from customer identification presented at the point-of-sale in said retail establishment;

a terminal for entering customer transaction data at the point-of-sale in said retail establishment;

a processor and

a memory responsive to said apparatus and said terminal for creating a database for a plurality of the store's customers' transaction data from prior shopping visits, such that data regarding individual customer's prior transactions are stored in association with said individual customer's unique identification code; and

circuitry associated with said memory and responsive to the entry of said individual customer's identification code during a transaction at the point-of-sale, said circuitry being operable to generate a customer information response signal at the point-of-sale representative of said individual customer's transaction history prior to the current shopping visit,

said signal providing information at said point-of-sale terminal derived from said database and useful for effectuating targeted customer promotion.

10. (Previously presented) A method for accumulating and using customer transaction data at the point-of-sale in a retail establishment comprising the steps of:

entering unique customer identification codes from customer identification presented at the point-of-sale in a retail transaction;

entering customer transaction data;

creating a database for a plurality of the store's customers' transaction data from prior shopping visits, such that data regarding individual customer's prior transactions are stored in association with said individual customer's unique identification code; and

generating a customer information response at the point-of-sale during said individual customer's transaction in said retail establishment upon detection of a unique identification code of said individual customer,

said response signal being related to said individual customer's transaction data in shopping visits prior to the current shopping visit, and

said response providing information at said point-of-sale derived from said database and useful for effectuating targeted customer promotion.

11. (Previously presented) A method for accumulating and using customer transaction data at the point-of-sale in a retail establishment comprising the steps of:

entering unique customer identification codes from customer identification presented at the point-of-sale in a retail establishment;

entering customer transaction data at the point-of-sale in said retail establishment;

creating a database for a plurality of the store's customers' transaction data from prior shopping visits, such that data regarding individual customer's prior transactions are stored in association with said individual customer's unique identification code;

accessing said database in response to the entry of said individual customer's identification code during a transaction at the point-of-sale;

determining from said database the transaction history of said individual customer; and

generating a customer information response at the point-of-sale representative of said individual customer's transaction history prior to the current shopping visit,

said response providing information at said point-of-sale derived from said database and useful for effectuating targeted customer promotion.

12. (Original) A system according to Claim 8,

wherein said circuitry generates said customer information response signal as a function of analysis by said circuitry of said individual customer's transaction data following said detection of said unique identification code of said individual customer.

13. (Original) A system according to Claim 9,

wherein said circuitry generates said customer information response signal as a function of analysis by said circuitry of said individual customer's transaction data following said entry of said individual customer's identification code.

14. (Original) A method according to Claim 10,

wherein said generating step includes the step of generating said customer information response as a function of analysis of said individual customer's transaction data following said detection of said unique identification code of said individual customer.

15. (Original) A method for providing customer services in a retail establishment, comprising the steps of:

- entering into a point-of-sale terminal a unique identification code for a customer;
- entering into said terminal transaction data relating to the customer's shopping transactions;
- generating and maintaining a database, including the step of correlating said transaction data with said unique identification code;
- responding to entry, during a current transaction, of said unique identification code for a customer by analyzing said transaction data of the customer, including data in said database from prior transactions, with or without data from the current transaction, in order to generate a response which is a function of said data in said database from prior transactions, and by
- supplying said response to said terminal during said current transaction in which said unique identification code is entered,
- said response including information for effecting a targeted promotion to the customer.

16. (Original) A method for providing services or promotions to customers in a retail establishment, comprising the steps of:

- entering into a point-of-sale terminal an account number from a payment instrument presented by a customer,
- and using said account number as a unique identification code for the customer;
- entering into said terminal transaction data relating to the customer's shopping transactions;
- generating and maintaining a database, including the step of correlating said transaction data with said unique identification code, said transaction data including data from at least one past transaction of each customer; and
- using said database to effect customer services which include targeted marketing and/or promotions,
- said using step including the step of analyzing said transaction data of the customer.

17. (Currently Amended) A computer implemented system for providing a signal at a point-of-sale depending upon a customer's shopping history, comprising:

a terminal for entering, during a transaction, a unique customer identification;

a database ~~local to the point-of-sale~~ storing transaction data from prior transactions for a plurality of customers, such that data regarding a customer's prior transactions are stored in association with an identification of that customer; ~~said database updatable from a global database concatenated from multiple store databases including said transaction data from the prior transactions of the customers at multiple stores;~~

circuitry responsive to the entry of said unique customer identification at said terminal during said transaction for transmitting to said point-of-sale during said transaction a customer information response signal; and

wherein said customer information response signal depends upon data stored in said database indicating dollar amount of at least one prior purchase associated with said unique customer identification.

18. (Original) The system of claim 17 wherein said customer information response signal depends upon dollar amount of a plurality of prior purchases associated with said unique customer identification.

19. (Original) The system of claim 17 wherein said customer information response signal also depends upon a frequency of prior purchases associated with said unique customer identification.

20. (Original) The system of claim 17 wherein said terminal can also receive customer transaction data.

21. (Original) The system of claim 17 wherein said data regarding said individual customer's prior transactions stored in association with said individual customer's identification in said database includes transaction frequency and dollar amount.

22. (Currently Amended) A computer implemented method for providing a signal at a point-of-sale depending upon a customer's shopping history, comprising the steps of:  
entering in a terminal, during a transaction, a unique customer identification;  
storing, in a database ~~local to the point-of-sale~~, transaction data from prior shopping transactions for a plurality of customers, such that data regarding a customer's prior transactions are stored in association with said an identification of that customer, ~~said database updatable from a global database concatenated from multiple store databases including said transaction data from the prior transactions of the customers at multiple stores;~~  
transmitting to a point-of-sale during said transaction a customer information response signal in response to the entry of said unique customer identification at said terminal during said transaction; and  
wherein said customer information response signal depends upon data stored in said database indicating dollar amount of at least one prior purchase associated with said unique customer identification.

23. (Original) The method of claim 22 wherein said customer information response signal depends upon dollar amount of a plurality of prior purchases associated with said unique customer identification.

24. (Original) The method of claim 22 wherein said customer information response signal also depends upon a frequency of prior purchases associated with said unique customer identification.

25. (Original) The method of claim 22 further comprising the step of receiving in said terminal customer transaction data.

26. (Original) The method of claim 22 wherein said data regarding said individual customer's prior transactions stored in association with said individual customer's identification in said database includes transaction frequency and dollar amount.

27. (Currently Amended) A computer implemented system for updating data in a customer database, comprising:

a terminal for entering, during a transaction, a unique customer identification and transaction data for said transaction;

a database ~~local to a point-of-sale~~, storing transaction data for a plurality of customers from prior shopping transactions, such that transaction data regarding prior transactions of a customer are stored in association with identification of that customer, ~~said database updatable from a global database concatenated from multiple store databases including said transaction data from the prior transactions of the customers at multiple stores~~; and

circuitry responsive to the entry of said unique customer identification and said transaction data at said terminal for updating transaction data and a dollar amount of purchases associated with said unique customer identification in said customer database, and for storing in said customer database the date that transaction data association with said unique customer identification was updated.

28. (Original) The system of claim 27 wherein said circuitry updates said transaction data associated with said unique customer identification during said transaction.

29. (Currently Amended) The system of claim 27 wherein said database also stores a ~~date of said transaction~~ time of day that said transaction data was updated in association with said unique customer identification.

30. (Currently Amended) A computer implemented method for updating data in a customer database, comprising the steps of:

entering in a terminal, during a transaction, a unique customer identification and transaction data for said transaction;

storing, ~~in a database local to a point-of-sale~~, transaction data for a plurality of customers from prior shopping transactions, such that data regarding a prior transactions of a customer are stored in association with identification of that customer, ~~said database updatable from a global~~

~~database concatenated from multiple store databases including said transaction data from the prior transactions of the customers at multiple stores; and~~

updating transaction data and a dollar amount of purchases associated with said unique customer identification in said customer database in response to entry of said unique customer identification and said transaction data at said terminal; and

storing in said customer database the date that transaction data association with said unique customer identification was updated.

31. (Original) The method of claim 30 wherein said circuitry updates said transaction data associated with said unique customer identification during said transaction.

32. (Currently Amended) The method of claim 30 further comprising the step of storing in said database a ~~date of said transaction~~ time of day that said transaction data stored in association with said unique identification was updated.

33. (Currently Amended) A computer implemented customer database ~~local to a point-of-sale~~, comprising stored transaction data from prior point-of-sale transactions for a plurality of customers, such that data regarding a customer's prior transactions are stored in association with an identification of that customer, ~~said database updatable from a global database concatenated from multiple store databases including said transaction data from the prior transactions of the customers at multiple stores~~, said transaction data stored in association with an identification of that customer including:

dollar amount of purchases and time period.

34. (Currently Amended) A computer implemented customer database ~~local to a point-of-sale~~, comprising stored transaction data from prior transactions for a plurality of customers, such that data regarding a customer's prior transactions are stored in association with an identification of that customer, ~~said database updatable from a global database concatenated from multiple store databases including said transaction data from the prior transactions of the~~



~~customers at multiple stores~~, said transaction data stored in association with said identification of that customer including:

~~total dollar amount of purchases purchased during a period of time associated with an identification of a customer.~~

35. (Original) The database of claim 34 wherein said period of time is one of a day and a week.

36. (Currently Amended) The database of claim 34 wherein said transaction data stored in association with said identification of that customer further comprises a number of transactions associated with an identification of a customer.

37. (Currently Amended) The database of claim 34 wherein said transaction data stored in association with said identification of that customer further comprises a frequency of transactions ~~associated with an identification of a customer.~~

38. (Currently Amended) The database of claim 34 wherein said transaction data stored in association with said identification of that customer further comprises a frequency of transactions for a specified period of time associated with an identification of a customer.

39. (Original) The database of claim 38 wherein said specified period of time is one of a day and a week.

40. (New) The system of any one of claims 17, 22, 27, 30, 33, and 34, wherein said database is local to the point-of-sale, said database stores transaction data from prior transactions for a plurality of customers such that data regarding a customer's prior transactions are stored in association with an identification of that customer, and said database is updatable from a global database concatenated from multiple store databases including said transaction data from the prior transactions of the customers at multiple stores.

41. (New) The system of claim 17 wherein said database stores the date that transaction data association with said unique customer identification was updated.

42. (New) The system of claim 17 wherein said terminal is in a first retail store, said database is a first store database, and said first store database is located at said first retail store.

43. (New) The system of claim 42 further comprising:  
a second store database local at a second retail store, said second store database storing transaction data from prior transactions at said second store for a plurality of customers, such that data regarding a customer's prior transactions are stored in said second store database in association with a unique identification of that customer; and  
a global database storing transaction data from prior transactions in both said first retail store and said second retail store.

44. (New) The system of claim 43 further comprising at least one data connection, said at least one data connection enabling transmission of data stored in said first store database and said second store database to said global database, and enabling transmission of data from said global database to each one of said first store database and said second store database.

45. (New) The system of claim 44 configured to update customer records in said first store database based upon data stored in said global database.

46. (New) The system of claim 44 configured to update customer records in said first store database based upon data stored in said global database for transactions that occurred in said second retail store.

47. (New) The system of claim 46 configured to update customer records in said first store database based upon data transmitted to said global database from said second store database for transactions that occurred in said second retail store.

48. (New) The system of claim 46 configured to update customer records in said second store database based upon data stored in said global database for transactions that occurred in said first retail store.

49. (New) The database of claim 33, wherein said database is structured to store in association with said identification of that customer transaction data including a first frequency of transactions by that customer during a first period of time.

50. (New) The database of claim 49, wherein said database is structured to store in association with said identification of that customer transaction data including a second frequency of transactions by that customer during a second period of time.

51. (New) The database of claim 50, wherein said database is structured to store in association with said identification of that customer transaction data including a third frequency of transactions by that customer during a third period of time.

52. (New) The database of claim 33, wherein said database is structured to store in association with said identification of that customer transaction data including a first dollar amount for one or more transactions by that customer during a first time period.

53. (New) The database of claim 52, wherein said database is structured to store in association with said identification of that customer transaction data including a second dollar amount for one or more transactions by that customer during a second time period.

54. (New) The database of claim 53, wherein said database is structured to store in association with said identification of that customer transaction data including a third dollar amount for one or more transactions by that customer during a third time period.

55. (New) The database of claim 33, wherein said database is structured to store in association with said identification of that customer a customer status.

56. (New) The database of claim 55, wherein said database is structured to store in association with said identification of that customer a date/time that said customer status changed.

57. (New) The database of claim 56, wherein said database is structured to store in association with said identification of that customer a previous status of said customer.

58. (New) The database of claim 33, wherein said database is structured to store in association with said identification of that customer a user flag.

59. (New) The database of claim 33, wherein said database is structured to store in association with said identification of that customer a transfer date/time indicating when the customer's record was last written to disk.

60. (New) The database of claim 33, wherein said database is structured to store in association with said identification of that customer an access date/time indicating when the customer's record was last accessed and updated.

61. (New) The database of claim 33, wherein said database is structured to store in association with said identification of that customer a total number of transactions since a last global update, said global update updating data stored in association with said identification of that customer based upon data stored in association with said identification of that customer in a second database.

62. (New) The database of claim 61, wherein said database is structured to store in association with said identification of that customer a total dollar volume since said last global update.

63. (New) The database of claim 33, wherein said database is structured so that it is indexed at least by customer identification.

64. (New) The database of claim 33, wherein said database is structured so that it is indexed at least by status.

65. (New) The database of claim 33, wherein said database is structured so that it is indexed at least by transfer date.

66. (New) A computer implemented system comprising:  
computer implemented customer database comprising stored transaction data from prior point-of-sale transactions, said stored transaction data comprising:

(1) data for a first customer such that data regarding said first customer's prior transactions are stored in a first customer record associating a first customer identification of said first customer with at least a first customer first dollar amount; and

(2) data for a second customer such that data regarding said second customer's prior transactions are stored in a second customer record associating a second customer identification of said second customer with at least a second customer first dollar amount;

a point of sale terminal;

a digital data processor;

and wherein said system is programmed to respond to transaction information received from the point of sale terminal including said first customer identification by identifying said first customer record in said database, and returning to said point of sale terminal a first customer information response signal;

wherein a value of said first customer information response signal depends at least in part upon data stored in said first customer record, including at least said first customer first dollar amount.

67. (New) The system of claim 66 wherein a value of said first customer information response signal also depends at least in part upon data stored in said first customer record, including at least a first customer second dollar amount.

68. (New) The system of claim 67 wherein a value of said first customer information response signal also depends at least in part upon data stored in said first customer record, including at least a first customer third dollar amount.

69. (New) The system of claim 66 wherein a value of said first customer information response signal also depends at least in part upon data stored in said first customer record, including at least a first customer first frequency value.

70. (New) The system of claim 69 wherein a value of said first customer information response signal also depends at least in part upon data stored in said first customer record, including at least a first customer second frequency value.

71. (New) The system of claim 70 wherein a value of said first customer information response signal also depends at least in part upon data stored in said first customer record, including at least a first customer third frequency value.

72. (New) The system of claim 67 wherein a value of said first customer information response signal also depends at least in part upon data stored in said first customer record, including at least a first customer first frequency value.

73. (New) The system of claim 72 wherein said signal also depends at least in part upon data stored in said first customer record, including at least a first customer second frequency value.

74. (New) The system of claim 66 wherein said signal also depends at least in part upon data stored in said first customer record, including at least a first customer first status value.

75. (New) The system of claim 74 wherein said signal also depends at least in part upon data stored in said first customer record, including at least a first customer first flag value.

76. (New) The system of claim 66 wherein said signal also depends at least in part upon data stored in said first customer record, including at least a first customer first time value.